

IN THE CLAIMS

1. (Currently Amended) A transformed *Salmonella* bacterium for use as a chimeric carbohydrate production cell, and having wherein the bacterium comprises:

(a) a lipooligosaccharide (LOS) or lipopolysaccharide (LPS) having comprising a core region containing a terminal heptose;

(b) a DNA sequence comprising an *rfe* gene an enzyme capable of adding an acceptor molecule to the terminal heptose; and

(c) an inserted sequence of isolated DNA sequence comprising a lipooligosaccharide-synthesis gene G (*lsgG*) from *Haemophilus influenzae*, wherein *lsgG* encodes LsgG, and wherein the *rfe* is regulated by LsgG such that a *H. influenzae*-specific Los is synthesized by the addition of an acceptor molecule to the terminal heptose encoding a glycotransferase for elongation of the acceptor molecule by sequential addition of saccharide monomer to produce ologosaccharide or polysaccharide.

2-4. (Cancelled)

5. (Currently Amended) The bacterium of claim 1 ~~2~~, which is *Escherichia coli* or *Salmonella minnesota*.

6. (Cancelled)

7. (Original) The bacterium claim 1, which has terminal heptose on a kdo core.

8. (Currently amended) The bacterium of claim 1, wherein the ~~enzyme is capable of adding~~ an acceptor molecule ~~which~~ is *N*-acetyl glucosamine.

9. (Currently amended) The bacterium of claim 1, wherein the LOS or LPS is an having inserted an isolated DNA sequence encoding a glycotransferase catalysing the synthesis of an

~~oligosaccharide of *Haemophilus influenzae*, *Neisseria spp.* or *Salmonella spp.*-specific LOS or~~
LPS.

10. (Currently amended) A process for producing a complex carbohydrate, which comprises the steps of:

- (a) inoculating production cells which are bacteria according to claim 1 ~~any of claims 1-9~~ into a culture medium capable of supporting the growth of said production cells;
- (b) allowing the growth of said production cells; and
- (c) recovering the complex carbohydrate from the culture medium.

11. (Currently Amended) The process of claim 10, which comprises the steps of extracting chimeric ~~lipooligosaccharide~~ lipoligosaccharide or lipopolysaccharide from the cultured cells, ~~hydrolysing the extracted lipooligosaccharide or lipopolysaccharide,~~ and recovering the resulting ~~oligosaccharide~~ oligosaccharide or polysaccharide.

12. (Cancelled)